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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/611,021	07/06/2000	Ki-Hyun Kim	678-504 (P9383)	4959

7590 12/18/2002  
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EXAMINER

SHARMA, SUJATHA R

ART UNIT PAPER NUMBER

2682

DATE MAILED: 12/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/611,021

Applicant(s)

KIM ET AL.

Examiner

Sujatha Sharma

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

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***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35

U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 and 6,7 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Ohtsuka [US 5,923,751] in view of Martensson [US 5,151,946].

The reference Ohtsuka [US 5,923,751] is included in the applicant's information disclosure statement (IDS).

Regarding claims 1 and 3, Ohtsuka discloses an opening and closing device for a portable telephone. Ohtsuka further discloses a main body and a sub-body closably mounted on the main body. Ohtsuka further discloses the opening/closing device located in the main body. Ohtsuka further discloses a detector to detect the opening angle and a controller for controlling the rotation of opening/closing to a pre-determined angle. See abstract, summary of invention and column 2, line 8 – column 4, line 65. Ohtsuka however does not disclose the switch for driving the opening/closing device.

Martensson [US 5,151,946] teaches a method of using a motor for automatic opening/closing of the sub body over the main body. See column 5, line 57 – column 6, line 5.

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Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to include the above teachings of Martensson in Ohtsuka's device to facilitate the user with automatic opening/closing of the sub-body over the main body of the mobile phone.

Regarding claim 2, Ohtsuka further discloses the opening/closing device to include a hollow module housing with through hole and a decelerating module inserted in the module housing and the sub-body coupler..... See Figures 1,2,8, column 2, line 8 – column 4, line 65

Regarding claim 6, Ohtsuka further discloses the sub-body to be a flip cover. See Fig.1, abstract and summary of invention.

Regarding claim 7, Ohtsuka further discloses the sub-body to be a folder. See Fig.1, abstract and summary of invention.

4. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohtsuka [US 5,923,751] in view of Martensson [US 5,151,946] and further in view of Pehrsson [US 6,314,183].

Regarding claim 4, the modified Ohtsuka as treated in claim 1 does not disclose the method of detecting the opening/closing device by detecting a magnet mounted on the sub-body.

Pehrsson teaches the use of magnet sensor for detecting the position of the movable element in relation to the apparatus housing. See abstract and summary of invention.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to include the above teachings of Pehrsson in the modified Ohtsuka's device in order for the mobile telephone to detect the position of the flip cover relative to the main housing and accordingly provide the on-hook/off-hook condition.

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Regarding claim 5, Pehrsson further teaches the use of sensor that lightens the keypad and display when the flip cover moved from its closed position to its open or extended position. See column 1, lines 47-55.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wohl [WO 92/09163] discloses a portable telephone housing.

Nagai [US 5,668,867] discloses a foldable portable telephone with improved antenna gain.

Alameh [US 6,104,808] discloses a portable communication device with speaker phone operation.

Lee [US 6,125,289] discloses a portable terminal having dual opposing flip covers.

Kim [US 6,359,984] discloses a flip-up type mobile telephone terminal, which enables user to answer calls without opening flip or folder.


Jeong [US 6,438,228] discloses a hinge device of mobile telephone.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sujatha Sharma whose telephone number is 703-305-5298. The examiner can normally be reached on Mon-Fri 7.30am - 4.00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 703-308-6739. The fax phone numbers for the organization where this application or proceeding is assigned and for all official communications is 703-872-9314.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3800.

  
Sujatha Sharma  
December 6, 2002

  
VIVIAN CHIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600